

Contribution to Beyond GDP „Virtual Indicator Expo“

<http://www.beyond-gdp.eu>

Name of the indicator/method: **Happy Life Years** (HLY)

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Need for a measure of quality of life in nations

How to assess how well a nation is doing? One way is to look at the quality-of-life of the people who live there. This view is gaining prominence, both among policy makers and the general public. This begs the question what quality-of-life is precisely and how that can be measured comprehensively.

Assumed quality-of-life

Quality-of-life in nations is commonly measured by taking stock of conditions that are believed to make for a better life, such as economic affluence, full employment and education. Measures of such conditions are added in an index, like the Human Development Index (HDI) or the Index of Social Progress (ISP).

Items in such indexes are typically things that are on the political agenda and as such these indexes inform about progress on the way chosen. Yet these indexes do not tell us whether we are on the right track, that is, whether these policy achievements really improved the lives of citizens. Still another problem is that such measures typically assume that more is better and do not inform us about an optimum, e.g. how many years of education is optimal for a good life.

Apparent quality of life

Another approach is to assess how well people thrive in a society. The focus is then on the outcomes of life, rather than on the preconditions. How well an organism thrives is typically reflected in its lifetime. In higher animals, thriving reflects also in affective experience and humans are moreover able to estimate how well they have felt over longer periods of time. These estimates of how we feel most of the time are at the basis of the appraisal of how happy we are. Hence in the case of humans, thriving reflects both in how long and how happy they live.

Measure of Happy Life Years

How can we assess how long and happy people live in a country? This can be done combining data on average happiness assessed in surveys of the general population with data on longevity taken from civil registration.

Happiness

Happiness is how much one likes the life one lives. Since this is something people have in mind, it can be measured using single direct questions. An example of a survey question on happiness is:

Taking all together, how satisfied or dissatisfied are you currently with your life as a whole?

1 2 3 4 5 6 7 8 9 10
Dissatisfied Satisfied

Longevity

How long people will live in a country can be estimated on the basis of longevity of people who have passed away. Statisticians call this life expectancy.

Happy-Life-Years = Life-expectancy at birth x 0-1 happiness

Suppose that life expectancy in a country is 60 years. If everybody were perfectly happy in that country (average score 10), people would live 60 Happy Life Years in that country. If the average score is 5 the number of Happy Life Years is obviously lower, in this case $60 \times 0,5 = 30$. If life expectancy is also 60 years but average happiness 8, the number of happy life years is 48 ($60 \times 0,8$).

Large differences in Happy Life Years across nations

Theoretically, this indicator has a broad variation; HLY is zero if nobody can live in the country, and will be endless if society is ideal and its inhabitants immortal. The practical range is about 50 years, the highest number of Happy Life Years is observed in Switzerland (63.9) and the lowest in Zimbabwe (11.5).

Happy Life Years in nations in the early 2000s

<i>Top</i> > 60 years		<i>Middle range</i> ± 40 years		<i>Bottom</i> <25 years	
Switzerland	63,9	Philippines	44,1	Moldova	23,7
Denmark	62,7	South Korea	43,8	Uganda	23,3
Iceland	62,2	Iran	41,4	Angola	17,6
Austria	61,0	Hungary	40,0	Tanzania	15,2

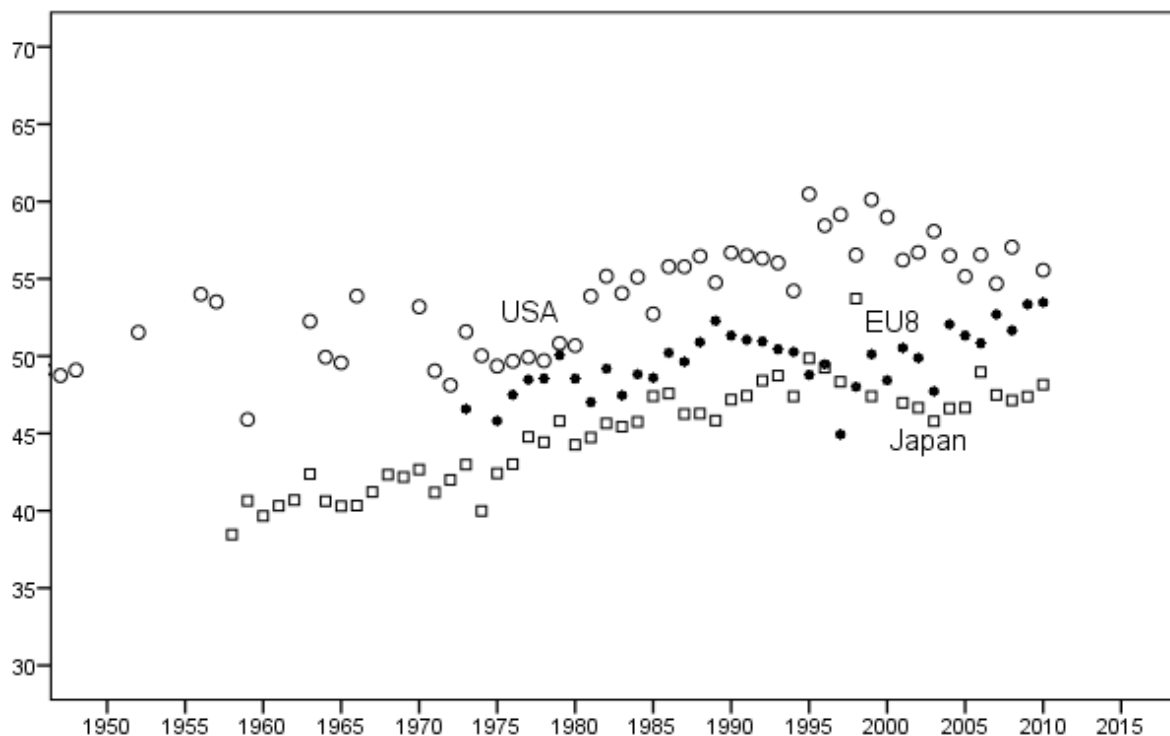
Australia	60,7	Morocco	37,9	Zimbabwe	11,5
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Full list of 149 nations available at:

http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_HappyLifeYears.php

Gains in Happy Life Years over time in EU8, Japan and the USA

Happiness has risen in slightly in most developed nations since the second half of the 20th century and life-expectancy has grown substantially. As a result, the number of Happy Life Years has grown remarkably.



Trend lines for 16 nation available at::

http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/TrendReport_HappyLifeYears.pdf

Happy Life Years sensitive for things that policy makers can improve

There is a system in the differences in Happy Life Years across nations. Most of the large differences in HLY across nations can be explained by societal variation in economic affluence, freedom, equality, brotherhood and justice. The table below presents correlations with indicators of these matters.

All variables in the table are things over which policy makers have some control. So the data leave no doubt that policy matters for final quality of life and also indicate what matters most. Economic affluence still stands out as a mayor factor, but 'rule of law' appears to be equally important.

Yet not everything deemed desirable appears to go with more happy life years. For instance, income-inequality rather appears to be slightly positively related to HLY. This illustrates the above difference between assumed quality of life.

Societal Qualities and Happy-Life-Years in 144 nations in the 2006

Condition in nation	Correlation with HLY		
	<i>Zero order</i>	<i>Wealth Controlled</i>	<i>N</i>
Wealth			
• Purchasing power per head	+0.70	-	134
Freedom			
• Economic	+0.63	+0.35	135
• Political	+0.57	+0.35	127
• Personal	+0.58	+0.58	54
Equality			
• Inequality in incomes	-0.24	+0.08	116
• Discrimination of women	-0.88	-0.76	96
• Inequality in happiness (SD)	-0.41	-0.23	140
Brotherhood			
• Tolerance	+0.46	+0.30	90
• Trust in compatriots	+0.46	+0.15	72
• Voluntary work	+0.09	+0.04	144
• Social security	+0.20	+0.20	51
Justice			
• Rule of law	+0.71	+0.37	143
• Respect of civil rights	+0.57	+0.37	127
• Corruption	-0.72	-0.37	143
Explained variance	94%		

Source: World Database of Happiness, Data file States of Nations, version 2013B

Literature

Veenhoven, R. (1996)

[Happy life-expectancy: A comprehensive measure of quality-of-life in nations](#)

Social Indicators Research, 39: 1-58

Veenhoven, R. (2005d)

[Apparent quality of life: How long and happy people live](#)

Social Indicators Research, 71: 61-86

World Database of Happiness, Archive of research findings on subjective enjoyment of life

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Available at: <http://worlddatabaseofhappiness.eur.nl>